

Order 14 86



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

RBE350A93-5400-00
Job Sheet 172725



Part No: RBE350A93-5400-00

Job Qty: 1 ea

Part Name: Arriel Engine Support



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 2/21/18

Job Tracking No:

Due Date: 2/28/18

Created By: Michelle Gagnon-Donovan

Type: SOLD

Description:

Note: DWG RBE350A93-5400-00 REV:4C IPP REV A 18.02.20 NEW ISSUE RQ VERIFIED BY DP

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	1 Ea	2/27/18	2/27/18	0.00	0.00	Purchasing Start-Up		NIR mcl
92	Purchasing	1 pcs	2/27/18	2/27/18	0.00	0.00	Purchasing		AT 18/05/02
94	Packaging	1 pcs	2/27/18	2/27/18	0.00	0.00	Packaging2		ADP 18/05/02
96	QC	1 pcs	2/27/18	2/27/18	0.00	0.00	QC6		38
100	Small Fab	1 pcs	2/28/18	2/28/18	0.08	0.33	Small Fab-9		MIC 38
110	QC	1 pcs	2/28/18	2/28/18	0.00	0.00	QC5		38
130	Packaging	1 pcs	2/28/18	2/28/18	0.00	0.00	Packaging3-2		18-05-11
140	QC21-FG	1 Ea	2/28/18	2/28/18	0.00	0.00	QC21		21 MAY 11 2018

Part Op 92 - Issue P/O: 039098 MANUFACTURE RB AS PER DWG Supplier: METEC Certificate of

Descriptions: conformity is required

100 - - Assemble. - Apply T/N and T/NAME

130 - Identify and Stock

FEB 23 2018

mcl

GA133

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
2517775 -	Feet	2 Ea (2 ea)	90-Start up Operation	
4PB84 -	Hook Bolt	2 Ea (2 ea)	90-Start up Operation	
91083A031 -	Flat Washer 3/8" x 13/32" ID x 13/16" OD	2 Ea (2 ea)	90-Start up Operation	
RBE350A93-5400-00-1	Weldment	1 Ea (1 ea)	90-Start up Operation	
RBE350A93-5400-00-21	Weldment	2 Ea (2 ea)	90-Start up Operation	
90866A140 -	Wing Nut	2 Ea (2 ea)	92-Purchasing	5067761
92988A670 -	Quick Release Button	2 Ea (2 ea)	92-Purchasing	5067760
94744A265 -	Washer	2 Ea (2 ea)	92-Purchasing	5067758
RBE350A93-5400-00-17	Emblem, Tool Number 141	1 Ea (1 ea)	92-Purchasing	5067757
RBE350A93-5400-00-19	Emblem, Arriel Engine Support 141	1 Ea (1 ea)	92-Purchasing	5067756
RBE350A93-5400-00P	Arriel Engine Support	1 pcs (1 ea)	92-Purchasing	5067753

6050546
5050554



Dart Aerospace Ltd.

1270 Aberdeen Street
Hawkesbury, ON K64 1K7
CANADA

TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Container No: S067762



Arriel Engine Support

PART NO: RBE350A93 - 5400 - 00

Serial No/Batch: S067762

Revision:

Operation: Packaging

Change No:

Mfg Date: 05/02/18

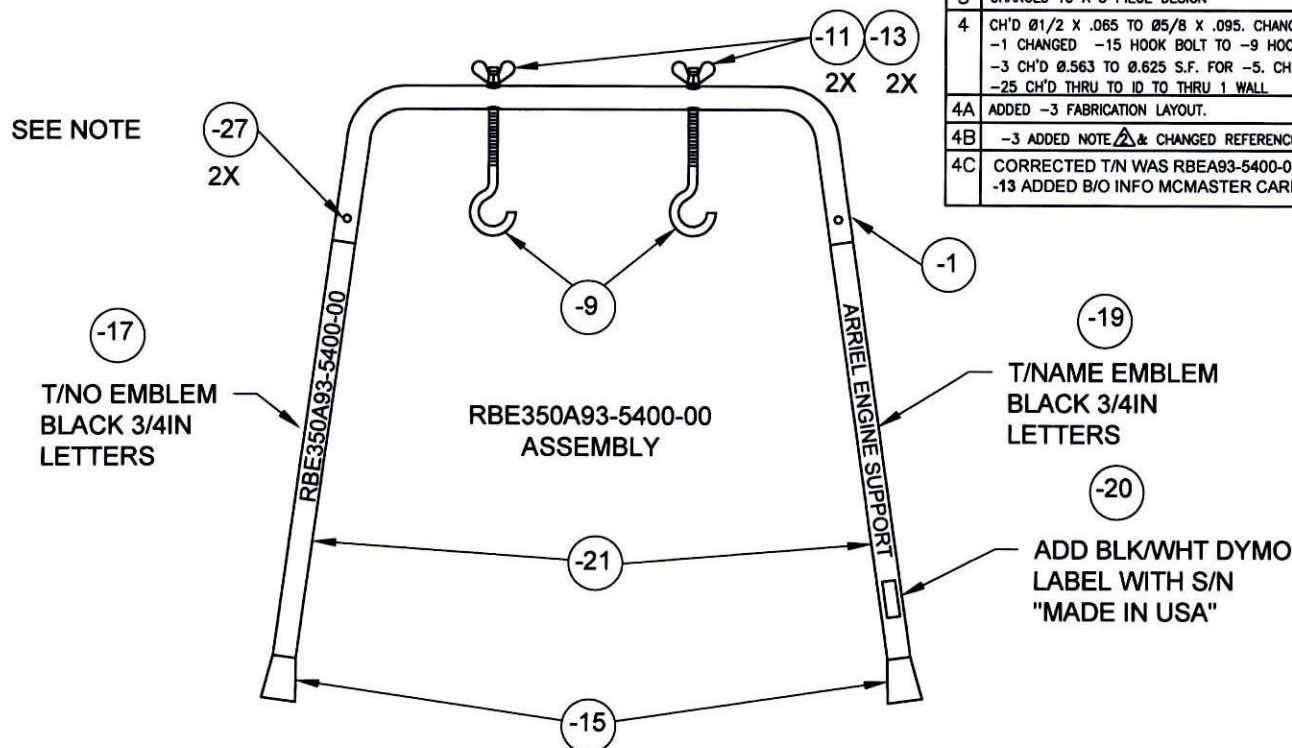
Job No: 172725

Job Allocations				
Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	2517T75	2	0	0
	4PB84	2	0	0
	91083A031	2	0	0
	RBE350A93-5400-00-1	1	0	0
	RBE350A93-5400-00-21	2	0	0
92-Purchasing	90866A140	2	0	0
	92988A670	2	0	0
	94744A265	2	0	0
	RBE350A93-5400-00-17	1	0	0
	RBE350A93-5400-00-19	1	0	0
	RBE350A93-5400-00P	1	3	0
Part Specifications				
Specifications could not be found.				

Plex 2/21/18 2:06 PM Dart.Gagnon.Michelle

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REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED
1	CHANGE FROM MBx1.25 x 190.5mm long HOOK BOLT & HARDWARE BECAUSE OF AVAILABILITY.	11/20/08	WP	DW
2	CHANGED PIPE CORNER RADIUS FROM R4.5 TO R2.5 PER DIE AVAILABILITY.	2/13/09	WP	RW
3	CHANGED TO A 3 PIECE DESIGN	2/10/12	JAG	
4	CH'D Ø1/2 X .065 TO Ø5/8 X .095. CHANGED SOURCE FOR -9 FROM STANLY TO GRAINGER -1 CHANGED -15 HOOK BOLT TO -9 HOOK BOLT. ADDED 1.00 DIM FOR BUSHING -3 CH'D Ø.563 TO Ø.625 S.F. FOR -5. CH'D THRU TO ID TO THRU 1 WALL. -25 CH'D THRU TO ID TO THRU 1 WALL	5/4/12	JAG	
4A	ADDED -3 FABRICATION LAYOUT.	10/22/12	RJC	SE
4B	-3 ADDED NOTE ^A & CHANGED REFERENCE DIMENSION CALLOUTS (21.50) FROM 21.50 REF	1/3/13	BIM	SE
4C	CORRECTED T/N WAS RBEA93-5400-00 IS RBE350A93-5400-00. -5 ADDED DWG. -13 ADDED B/O INFO MCMMASTER CARR # 90866A140.	5/23/14	DJN	RJC



ASSY QTY	ASSY QTY	B/O	PART #	UNIT QTY	DESCRIPTION	MATERIAL	B/O INFORMATION OR SPECIFICATIONS	Pg.
			-1	1	WELDMENT		USE -3 & -5	2
1			-3		TUBE FRAME	DOM	Ø1 x .120 WALL x 30-1/2 (ADD EXTRA FOR BENDING & CUT LENGTH)	3
2			-5		BUSHING	DOM	Ø5/8 x .095 WALL x 1	7
1		B/O	-7		WASHER	PLAIN	Ø3/8 I.D. x Ø13/16 O.D. MCMMASTER-CARR #91083A031	4
		B/O	-9	2	HOOK BOLT	PLATED	3/8-16 UNC x 7-1/4 LONG GRAINGER #4PB84	1
		B/O	-11	2	WASHER	PLATED	Ø3/8 I.D. x Ø.734 O.D. MCMMASTER CARR #94744A265	1
		B/O	-13	2	WING NUT	PLATED	3/8-16 UNC MCMMASTER CARR #90866A140	1
		B/O	-15	2	FEET	BLACK RUBBER	Ø1 x 1-9/16 HEIGHT MCMMASTER-CARR #2517T75 BLACK	1
		B/O	-17	1	EMBLEM, TOOL No.	PLASTIC	SIGNS NOW 3/4" LETTERS	1
		B/O	-19	1	EMBLEM, ARRIEL ENGINE SUPPORT	PLASTIC	SIGNS NOW 3/4" LETTERS	1
		B/O	-20	1	DYMO LABEL	VINYL		1
			-21	2	WELDMENT			4
1			-23		LEG	DOM	Ø1.00 X .120 WALL X 20-1/4	5
1			-25		INSERT	DOM	Ø3/4 X .095 WALL X 4-1/4	6
		B/O	-27	2	QUICK-RELEASE BUTTON	S.S.	Ø9/16 MCMMASTER-CARR #92988A670	1

NOTES:

1. INSERT -27 INTO THE INNER TUBE OF -21.
2. REF. EUROCOPTER T/N: 350A93-5400-00.

RED BARN MACHINE

ARRIEL ENGINE SUPPORT

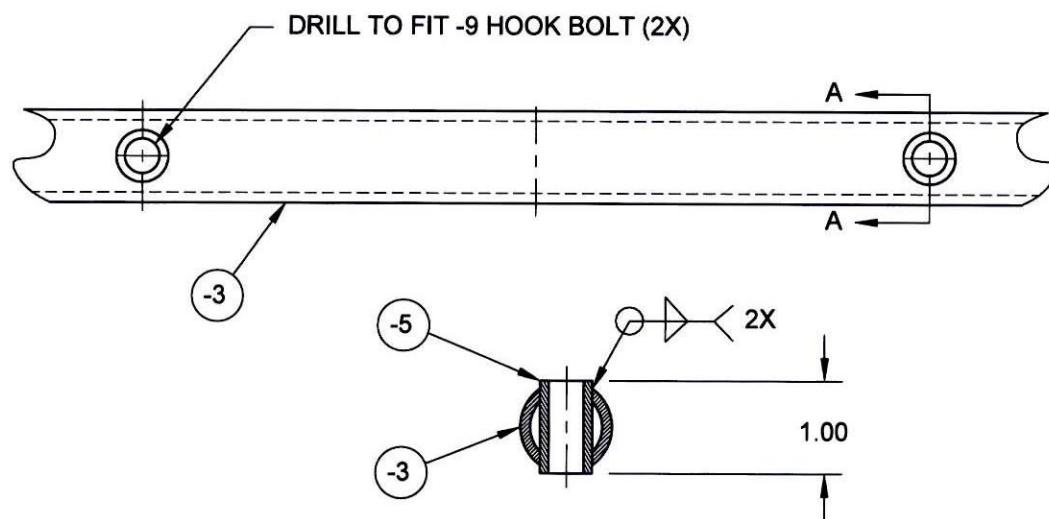
RBE350A93-5400-00

REV 4C

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		DRAWN BY: PERRITT
TOLERANCES ON:		APPROVED: <i>D. Hall</i>
DECIMALS		FINISH
.XXX ± .005	FRACTIONS ± 1/32	SPEC
.XX ± .01	ANGLES ± 5°	
.X ± .1		
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES .015 x 45° PR .015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING		USED ON MODEL
SCALE 1:8		EUROCOPTER AS350A
DATE 11-20-08		SHEET 1 of 7

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REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED
1	CHANGE FROM M8x1.25 x 190.5mm long HOOK BOLT & HARDWARE BECAUSE OF AVAILABILITY.	11/20/08	WP	DW
2	CHANGED PIPE CORNER RADIUS FROM R4.5 TO R2.5 PER DIE AVAILABILITY.	2/13/09	WP	RW
3	CHANGED TO A 3 PIECE DESIGN	2/10/12	JAG	
4	CHANGED -15 HOOK BOLT TO -9 HOOK BOLT. ADDED 1.00 DIM FOR BUSHING	5/4/12	JAG	



SECTION A-A

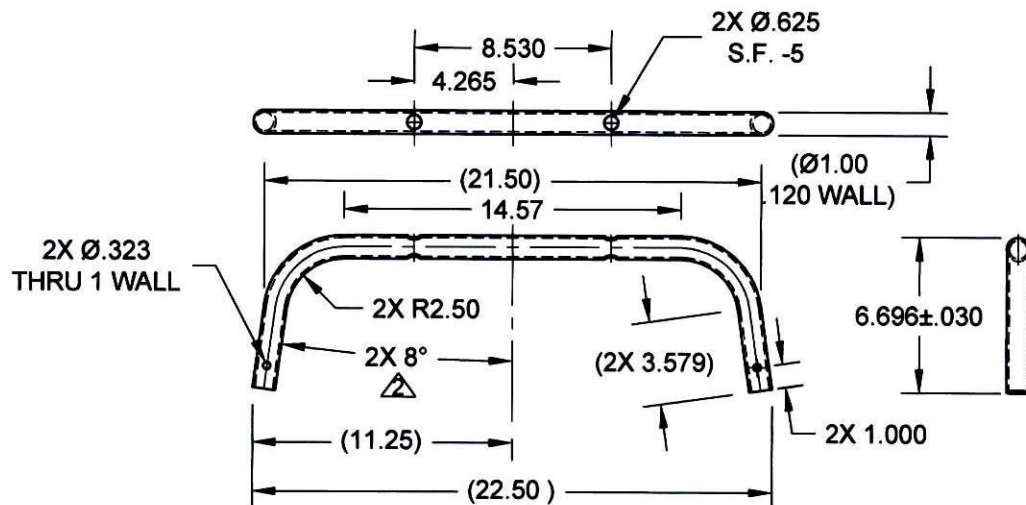
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WELDMENT

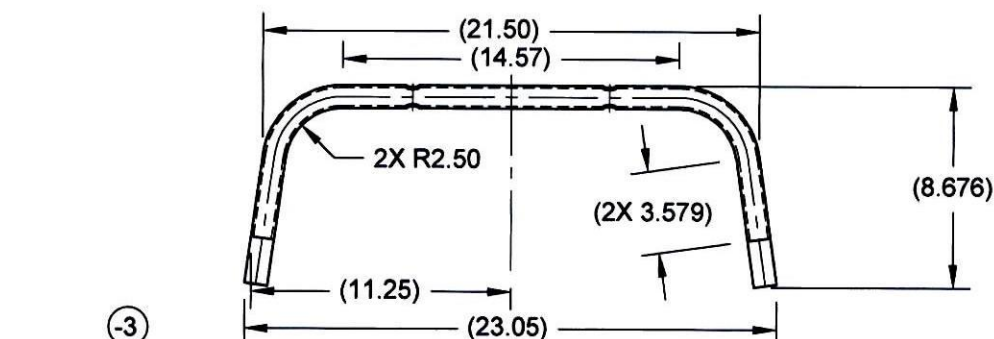
RED BARN MACHINE		TITLE	
		ARRIEL ENGINE SUPPORT	
DWG NO.		REV	
RBE350A93-5400-00-1		4C	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		DRAWN BY: PERRITT	
TOLERANCES ON:		APPROVED: <i>D. Hall</i>	
DECIMALS .XX ± .005		FINISH POWDER COAT YELLOW	
FRACTIONS ± 1/32		SPEC FED #13538	
ANGLES ± 5°			
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES .015 x 45° PR .015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING		USED ON MODEL	
		EUROCOPTER AS350A	
SCALE	DATE	SHEET	
1:2	11-20-08	2 of 7	

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REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED
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2	CHANGED PIPE CORNER RADIUS FROM R4.5 TO R2.5 PER DIE AVAILABILITY.	2/13/09	WP	RW
3	CHANGED TO A 3 PIECE DESIGN	2/10/12	JAG	-
4	CH'D Ø.563 TO Ø.625 S.F. FOR -5. CH'D THRU TO ID TO THRU 1 WALL	5/4/12	JAG	-
4A	ADDED -3 FABRICATION LAYOUT.	10/22/12	RJC	SE
4B	ADDED NOTE Δ & CH'D REF DIM CALLOUTS (21.50) FROM 21.50 REF, ADDED LIMITS TO 6.696 DIM(+/- .030).	1/3/13	BIM	SE



③
TUBE
FRAME



③
REF. FABRICATION
LAYOUT

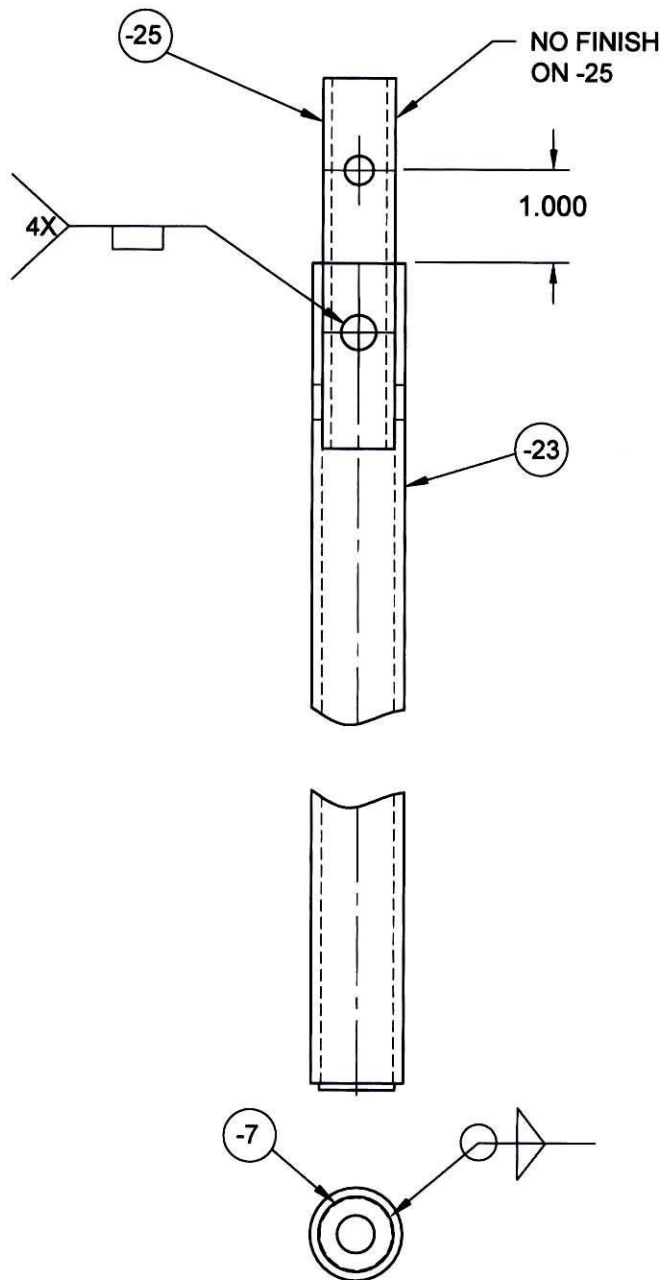
REF. TOTAL LENGTH 34.313

NOTES:

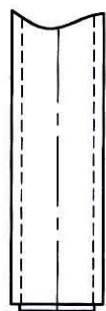
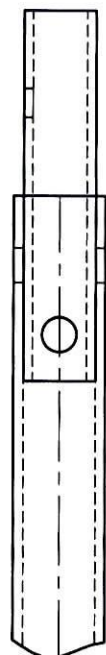
- REF. FINISH LENGTH 30.316
- USE ANGLE TEMPLATE TO VERIFY PROPER 8° ANGLE

RED BARN MACHINE	
TITLE ARRIEL ENGINE SUPPORT	
DWG NO. RB350EA93-5400-00-3	REV 4C
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: DECIMALS .XXX ± .005 .XX ± .01 .X ± .1 FRACTIONS ± 1/32 ANGLES ± .5°	
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES .015 x 45° PR .015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE 1:8	DATE 11-20-08
SHEET 3 of 7	

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REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED
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2	CHANGED PIPE CORNER RADIUS FROM R4.5 TO R2.5 PER DIE AVAILABILITY.	2/13/09	WP	RW
3	CHANGED TO A 3 PIECE DESIGN	2/10/12	JAG	



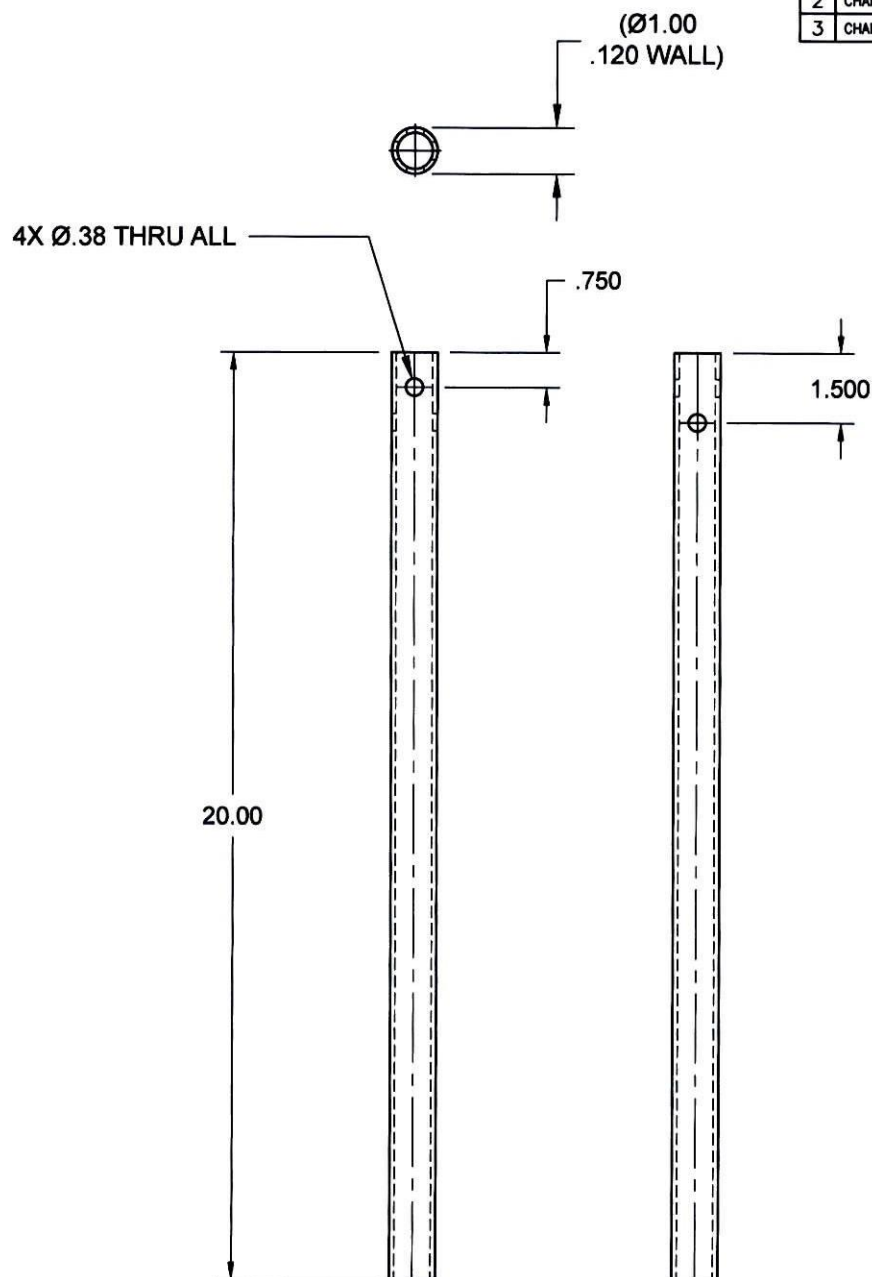
-21

WELDMENT

RED BARN MACHINE	
TITLE ARRIEL ENGINE SUPPORT	
DWG NO. RBE350A93-5400-00-21	REV 4C
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: DECIMALS .XXX ± .005 .XX ± .01 .X ± .1 FRACTIONS ± 1/32 ANGLES ± 5°	
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES .015 x 45° PR .015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
DRAWN BY: PERRITT APPROVED: FINISH: POWDER COAT YELLOW SPEC: FED #13538	USED ON MODEL EUROCOPTER AS350A
SCALE 1:2	DATE 11-20-08 SHEET 4 of 7

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REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED
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2	CHANGED PIPE CORNER RADIUS FROM R4.5 TO R2.5 PER DIE AVAILABILITY.	2/13/09	WP	RW
3	CHANGED TO A 3 PIECE DESIGN	2/10/12	JAG	

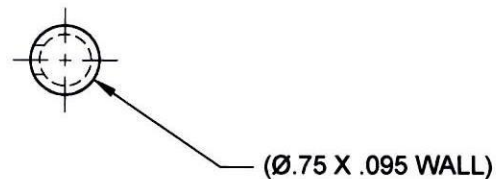
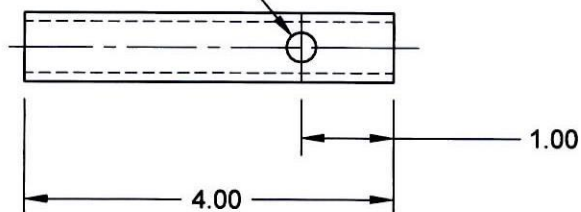


RED BARN MACHINE	
TITLE ARRIEL ENGINE SUPPORT	
DWG NO. RBE350A93-5400-00-23	REV 4C
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
TOLERANCES ON:	
DECIMALS .XXX ± .005	FRACTIONS ± 1/32
.XX ± .01	ANGLES ± 5°
X ± 1	
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES .015 x 45° PR .015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
DRAWN BY: PERRITT	
APPROVED: <i>[Signature]</i>	
FINISH: SEE -21 WELDMENT	
SPEC:	
USED ON MODEL	
EUROCOPTER AS350A	
SCALE 1:4	DATE 11-20-08
SHEET 5 of 7	

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REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED
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2	CHANGED PIPE CORNER RADIUS FROM R4.5 TO R2.5 PER DIE AVAILABILITY.	2/13/09	WP	RW
3	CHANGED TO A 3 PIECE DESIGN	2/10/12	JAG	
4	CH'D THRU TO ID TO THRU 1 WALL	5/4/12	JAG	

Ø.32 THRU 1 WALL



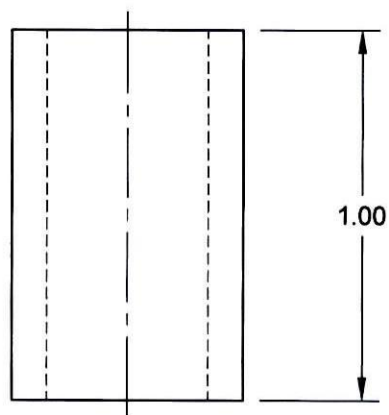
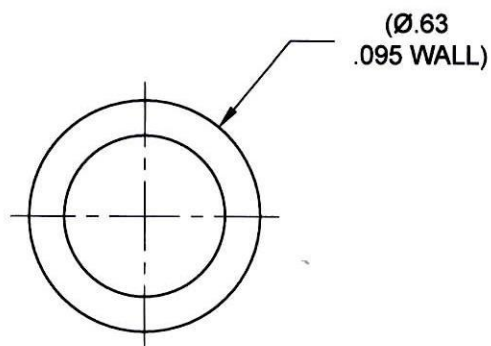
(-25)

INSERT

RED BARN MACHINE	
TITLE ARRIEL ENGINE SUPPORT	
DWG NO. RBE350A93-5400-00-25	REV 4C
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
TOLERANCES ON:	
DECIMALS .XXX ± .005	FRACTIONS ± 1/32
.XX ± .01	ANGLES ± 5°
.X ± .1	
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES .015 x 45° PR .015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE 1:2	DATE 11-20-08
SHEET 6 of 7	
DRAWN BY: APPROVED: <i>D. West</i> FINISH: SEE-21 WELDMENT SPEC: USED ON MODEL EUROCOPTER AS350A	

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REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED
4C	-5 DRAWING ADDED	5/23/14	DJN	RJC



⑤
BUSHING

RED BARN MACHINE	
TITLE ARRIEL ENGINE SUPPORT	
DWG NO. RBE350A93-5400-00-5	REV 4C
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
TOLERANCES ON:	
DECIMALS .XXX ± .005	FRACTIONS ± 1/32
.XX ± .01	ANGLES ± 5°
X ± 1	
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES .015 x 45° PR .015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
DRAWN BY:	
APPROVED <i>D. Wood</i>	
FINISH SEE-1 WELDMENT	
SPEC	
USED ON MODEL	
EUROCOPTER AS350A	
SCALE 2:1	DATE 11-20-08 SHEET 7 of 7



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

PO039098

Supplier: MEM001-VC
Metec Metal Technology Inc.
20 Terry Fox Drive PO Box 781
Vankleek Hill
ON
K0B 1R0 Canada
Phone: 613 678 3957
Fax: 613 678 3956

Attention: Walz, Shigi

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: PO039098

PO Date: 2/23/18

Due Date: 5/4/18

Purchase Order

Revision:

Revision Date:

Ship-To Contact: Baker, Diane
Phone: dbaker@dartaero.com

Via: Ground

Pymt Terms: Net 30

Freight Terms:

Special Comments:

Items

Line Item	Part	Supplier Part No	Item No	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
2	RBE350A93-5400-00P			Arriel Engine Support As Per Dwg RBE350A93-5400-00 Rev. 4C	Firmed	5/4/18	1 pcs	0 pcs	1 pcs	\$746.40/pcs	\$746.40

DAE
38
9-89

Line Item Note job# 172725

Grand Total: \$746.40

Order Notes

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Procurement Quality Clauses

A005 RIGHT OF ENTRY

A007 FIRST ARTICLE INSPECTION (FAI) BY SELLER, (DOCUMENTATION MAINTAINED BY SUPPLIER)

A012 CHEMICAL AND PHYSICAL TEST REPORTS

A016 PERSONNEL QUALIFICATION

A017 RAW MATERIAL IDENTIFICATION (AS APPLICABLE)

A026 CERTIFICATION OF MATERIAL CONFORMANCE

A041 QUALITY MANAGEMENT SYSTEM

A042 DART NOTIFICATION BY SUPPLIER

A043 RETENTION OF QUALITY DOCUMENT

A048 COUNTERFEIT PARTS AVOIDANCE, DETECTION, MITIGATION AND DISPOSITION PROGRAM

A049 SUPPLIER AWARENESS

Plex 5/2/18 11:38 AM dart.lavoie.chantal



20 Terry Fox Drive, Vankleek Hill, Ontario K0B 1R0

Tel. (613) 678-3957 & (613) 678-2782 Fax (613) 678-3956 metec@metec.ca

CERTIFICATE OF CONFORMITY

SOLD TO:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, Ont.
K6A 1K7

SHIPPED TO:

same

Quantity	Part Number	Part Name	P.O. Number
1	RBE350A93-5400-00 Rev.4C	Arriel Engine Support	39098

We hereby certify that the above parts were made in conformance with applicable drawings.

DAS
38
9-88

METEC Metal Technology Inc.


Shigi Walz

Vankleek Hill, April 30, 2018